

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-108007

(43)Date of publication of application : 24.04.1998

(51)Int.Cl.

H04N 1/393  
G06T 3/40  
// H04N 1/409

(21)Application number : 08-281364

(71)Applicant : RICOH CO LTD

(22)Date of filing : 02.10.1996

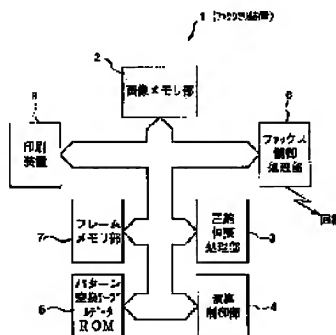
(72)Inventor : MASUDA TOSHIYA

## (54) IMAGE REDUCTION METHOD

## (57)Abstract:

PROBLEM TO BE SOLVED: To prevent image omission or the like from being generated in the linear part of a ruled line, a line in a character and an underline, etc., by selecting a reduction pattern for which it is estimated that the degradation of images is least.

SOLUTION: When the reduction of image data is required, replacement to the reduction pattern is performed by the unit of the total of four dots that are a front one dot (or front one line) and back two dots (or back two lines) with a dot under consideration as a center among the respective dots for constituting the image data or by a unit of  $4 \times 4$  dot, based on a conversion rule and the image data are reduced. A compression/expansion processing part 3 performs the processing of compressing non-worked bit map image data stored in an image memory part 2 and the processing of expanding the compressed code data to the bit map image data, etc. An arithmetic control part 4 performs the arithmetic processing of a dot (line) number required to be thinned, based on compressibility, the processing of extracting reference data from the image data and the processing of selecting the reduction pattern with a reference pattern as a retrieval key, etc.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

特開平10-108007

(43)公開日 平成10年(1998) 4月24日

(51)Int.Cl.<sup>9</sup> 識別記号

H 0 4 N 1/393

G 0 6 T 3/40

// H 0 4 N 1/409

F I

H 0 4 N 1/393

G 0 6 F 15/66

H 0 4 N 1/40

3 5 5 D

1 0 1 D

審査請求 未請求 請求項の数1 F D (全 9 頁)

(21)出願番号 特願平8-281364

(22)出願日 平成 8 年 (1996) 10 月 2 日

(71)出願人 000006747

株式会社リコー

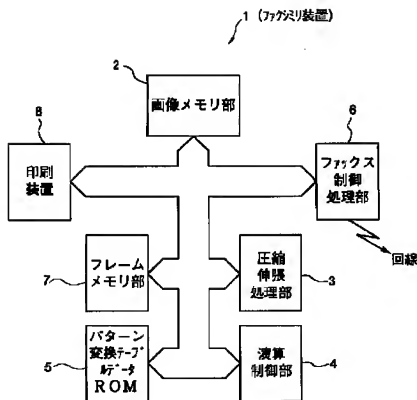
東京都大田区中馬込 1 丁目 3 番 6 号

(72)発明者 増田 俊哉

東京都大田区中馬込一丁目 3 番 6 号 株式  
会社リコー内

(54)【発明の名称】 画像縮小方法

(57)



(2)

1

2

10

20

30

40

50

10

20

30

40

50

*10*

*20*

*30*

*40*

*50*

(5)

7

8

10

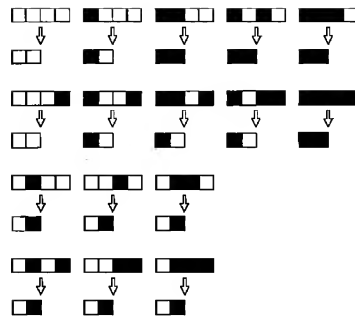
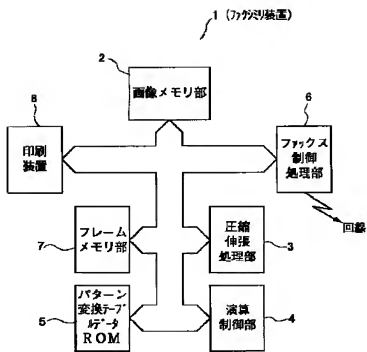
20

30

40

50

5



(7)

